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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/705,421	11/02/2000	Mark W. Bradley	INSTP007B	6524

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EXAMINER

DELGADO, MICHAEL A

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/705,421

Applicant(s)

BRADLEY, MARK W.

Examiner

Michael S. A. Delgado

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claim 5 is objected to because of the following informalities: Claim 5 depends on itself. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4 and 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,192,418 by Hale et al.

In claim 1, Hale teaches about a system for software module to module communication, comprising (Fig 3):

a module interface "External Procedure Call Program" capable of receiving a file system request configured in a first file system format based on a first operating system "O/S I", the

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module interface further capable of translating the received file system request into a second file system format based on a second operating system "O/S II" (Col 6, line 55-Col 7, line 15);

a first software module "Client Program" in communication with the module interface, the first software module capable of communicating file system requests configured in the first file system format to the module interface (Col 6, line 55-Col 7, line 15); and

a second software module "Server Program Function 106" in communication with the module interface, the second software module capable of communicating file system requests configured in the second file system format to the module interface, wherein the first software module is capable of communicating with the second software module via the module interface to facilitate data storage (Col 6, line 55-Col 7, line 25).

In claim 2 Hale teaches about a system as recited in claim 1, wherein the module interface is further capable of translating the received file system request into a third file system format (Col 4 lines 55-60); The heterogeneous nature of prior art applies to more than two file systems and are within the scope of the invention as claimed.

In claim 3 Hale teaches about a system as recited in claim 2, wherein the second software module is capable of providing a first function related to a first hardware type (Col 7, lines 5-15);

In claim 4 Hale teaches about a system as recited in claim 3, wherein a third software module capable of communicating file system requests configured in the third file system format to the module interface and capable of providing a second function related to a second hardware

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type can replace the second software module, and wherein the first software module is capable of communicating with the third software module via the module interface (Col 4 lines 50-60). (The heterogeneous nature of prior art applies to more than two file systems and is within the scope of the invention as claimed.)

In claim 6, Hale teaches about a independent storage node, comprising:

a Processor (Col 2, lines 50-60);

transport hardware in communication with the processor, the transport hardware being capable of communicating data via a transport connection (Col 6, line 55-Col 7, line 15); (There has to be a transport hardware and connection for remote operation to be possible) and

modular storage software executing on the processor, the modular storage software comprising a plurality of software modules "Procedure Calls" and a module interface that allows dynamic binding of the software modules, each of the plurality of software modules being defined to communicate a file system request to the module interface, the module interface being defined to provide file system request translation between the plurality of software modules (Col 4 lines 50-60) (Col 5, lines 25-35) (Col 6, line 55-Col 7, line 15).

In claim 7, Hale teaches about an independent storage node as recited in claim 6, wherein the modular storage software is configured to execute on the processor using a particular software module compatible with the specific processor (Col 2, lines 45-55) (Col 5, lines 20-40).

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In claim 8, Hale teaches about a independent storage node as recited in claim 6, wherein each of the plurality of software modules is capable of communicating with the processor via the module interface (Col 6, lines 30-40).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,192,418 by Hale et al in view of US Patent 6,400,730 by Latif et al.

In claim 5, Hale teaches all the limitation but does not explicitly teach about a system as recited in claim 5, wherein the first hardware type uses a SCSI protocol, and wherein the second hardware type uses a Fibre Channel protocol.

The SCSI and Fibre Channel protocol are well known standard and are disclosed in Latif's invention (Col 2, lines 15-30). It would have been obvious at the time of the invention for some one of ordinary skill to use standard protocol in order to guarantee interoperability.

In standard protocols, the rules are well defined which makes it easy to convert from one protocol to another.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,484,309 by Nowlin Jr. et al. teaches about enabling software designed for one operating system to operate on another operating system.

US Patent 5,812,843 by Yamazaki. et al. teaches about a system and method for executing job between different operating systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. A. Delgado whose telephone number is (571) 272-3926. The examiner can normally be reached on 7.30 AM - 5.30PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM A CUCHLINSKI JR can be reached on (571) 272-3925

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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